

Giving back to our specialty: Participate in the national anterior open-bite study

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How often have you reached the end of a systematic review and read the sentence, “Additional well-conducted studies are necessary to increase our understanding of this important topic.” Have you ever wondered how we are going to perform these “well-conducted” studies? For example, there are several new approaches for the treatment of anterior open bite in adults, including temporary anchorage devices, aligners, and mandibular surgery with counterclockwise rotation. But are these treatments as effective or as stable as other therapies, like maxillary surgery, the multiloop edgewise archwire technique, or premolar extractions? How can we find out?

Fortunately for the specialty of orthodontics, the National Dental Practice-Based Research Network (NDPBRN) will allow us to answer these kinds of questions. The NDPBRN provides a framework to enroll and train practitioners in research methods. Then, academicians and clinicians team together to ask the important clinical questions and develop the research protocols. Finally, the network provides the personnel and funding to conduct these studies in the offices of practicing clinicians. For anyone who wants better clinical evidence, this is a dream come true!

Although the NDPBRN was intended primarily for research on topics in general dentistry, specialties were invited to submit applications, and orthodontics is the first specialty to have a network study approved and funded: Anterior Openbite Malocclusions in Adults: Recommendations, Treatment, and Stability. This project aims to enroll over 200 orthodontists and 800 patients to assess the most effective and stable treatments for open bite. Orthodontists with at least 3 adult openbite patients in active treatment are eligible and encouraged to participate in this prospective study. Patients will be followed until the end of their treatment and then for

1 year of retention. Participating in the study will not affect your treatment or retention decisions, and patients and practitioners will be compensated for participating. The study has been designed to minimize impacts on everyday practice. For example, we only ask for records that you already collect, such as cephalometric x-rays and intraoral photographs. All patient and doctor questionnaires have been designed to be completed quickly and efficiently, and a dedicated and secure Web site has been created for uploading patient records.

It is vitally important for our specialty to conduct a successful study for several reasons. First, it is extremely difficult to obtain federal funding for orthodontic research. The National Institute of Dental and Craniofacial Research has indicated that practice-based research is an area it is willing to fund. Several years ago, approximately \$75 million was directed toward 3 regional networks, and the current national network is funded at \$66 million. We need to demonstrate to the National Institute of Dental and Craniofacial Research that the orthodontic specialty understands the value of practice-based research and, more importantly, that we are willing to participate.

Second, by participating in this study, you will help to produce the “better evidence” that is required to improve our knowledge of the treatment and stability of anterior open bite in adults. This study will not affect your treatment or retention decisions. We simply ask you to submit information about your patients’ treatment and retention outcomes. From that standpoint, it is extremely important that we receive a representative sampling of your treatment results, not just the “winners.” This is the ultimate goal of clinical research: better patient care. All patient and practitioner data will be anonymized before submission and analysis, and all results will be reported at the group level, not the individual patient or practitioner level.

Third, a successful study will allow orthodontic researchers to compete for future practice-based research funding. The establishment of the orthodontic network for the open-bite study will become an important resource for the profession, since this trained and

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experienced group of practitioners can be called upon to conduct future orthodontic studies.

There is only 1 problem: we need more orthodontists to join this effort. The NDPBRN has earmarked well over \$2 million to conduct this study. Please consider giving back to our specialty by participating in practice-based research. This type of research uses real patients in real practices to learn which techniques work. It is not “ivory tower” research done in university settings. It should be the most representative and generalizable data we can generate on a clinical topic. It is the evidence that we need to transition into a future with better clinical answers. However, we will only be successful if you are willing to participate.

For more information, please visit the NDPBRN Web site at <http://www.nationaldentalpbrn.org>. To enroll in the network, click “Enroll Now” at the top of the home page.

Additionally, you can obtain more information about network studies, including “frequently asked questions” for the open-bite study, at the American Association of Orthodontists Web site:

<https://www.aoinfo.org/library-research/aao-practice-based-research-network>.

Finally, I invite any of you who are interested to contact me at ghuang@uw.edu for more information.

Please help us to increase and improve the evidence base for our specialty and our patients!